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Citation for published version:

Fox, D 2019, 'The Anglo-Scots monetary union of 1707', *Edinburgh Law Review*, vol. 23, no. 3, pp. 360-387.
<https://doi.org/10.3366/elr.2019.0573>

Digital Object Identifier (DOI):

[10.3366/elr.2019.0573](https://doi.org/10.3366/elr.2019.0573)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Edinburgh Law Review

Publisher Rights Statement:

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Abstract

Article XVI of the Acts of Union of 1706 and 1707 created a monetary union by merging the Scottish monetary system with the sterling monetary system of England and Wales. It completed a process that began after the 1603 regal union between the two kingdoms. Its main purpose was to restore the circulating currency in Scotland and England to the same monetary standard, something which had been an aim of Scottish monetary policy since the early decades of the regal union. The monetary union of 1707 raised difficult numismatic and legal problems in the way prices were quoted, debts were paid and accounts were kept. The monetary events of 1707 illustrate how the legal conception of a monetary union can mean different things in different historical periods. Modern-day legal understandings of monetary union cannot be projected into the past when monetary systems were based on coins struck from intrinsically valuable metals.

Keywords

Monetary union – monetary intergration – monetary history – monetary law – UK constitutional history – Treaty of Union 1706 – Scotland – sterling currency - coinage

The Anglo-Scots Monetary Union of 1707

*David Fox**

A. INTRODUCTION

Debates over currency, monetary sovereignty and monetary unions have loomed large in European and British politics over the past two decades. The cession of national sovereignty needed to join a monetary union was seen, by the United Kingdom at least, as a step too far when formation of the euro-area was debated in the 1990s. More recently, the question of the currency that might be used by an independent Scotland has become a point of contention in the debates over Scottish independence.

The recent debates in Scotland have an historical backdrop which is the subject of this article. The existing monetary system of the United Kingdom results from at least two monetary unions and one partial dis-union in modern times. The monetary system of Scotland was merged with that of England and Wales by Article XVI of the two Acts of Union of 1707, which enacted the Treaty negotiated the previous year.¹ Northern Ireland belongs to the United Kingdom monetary system as the remaining part of a monetary union in 1826 between Ireland and the United Kingdom of Great Britain, as it then was.² The rest of Ireland gained its monetary sovereignty, along with its political independence, in 1922.

The Anglo-Scots monetary union has almost entirely escaped historians' attention. They have tended to concentrate instead on the political union of 1707 and its significance in ensuring a protestant succession north and south of the border. They have analysed the economic drivers for the union, such as access to England's overseas trading networks, the

* School of Law, University of Edinburgh. I am grateful for access and assistance provided by the Edinburgh archives of the Lloyds Banking Group and the Royal Bank of Scotland, and for funding assistance from the Cambridge Humanities Research Grant Scheme. I am grateful also for comments made by Professor George Gretton, Professor Richard Nolan and Professor Kenneth Reid, and by the anonymous reviewer. The usual disclaimers apply. The following standard forms of citation to archival sources are used: BOS: Lloyds Banking Group Archives, Edinburgh; NRS: National Records of Scotland, Edinburgh; PRO: Public Record Office, National Archives, Kew; RBS: Royal Bank of Scotland Archives, Edinburgh. Citations to coinage-related Acts of the pre-1707 Parliament of Scotland and the Privy Council of Scotland are to the transcriptions printed in R W Cochrane-Patrick (ed), *Records of the Coinage of Scotland*, vols 1-2 (1876) in the form APS RCS or APCS RCS respectively (including proclamations of the Privy Council of Scotland). Citations to proclamations of the English Privy Council follow the numbering in J Larkin and P Hughes, *Stuart Royal Proclamations*, vol 1 (1973).

¹ Union with Scotland Act 1706, Statute (England) 8 Anne c 8 (1706/7); Union with England Act 1707, APS, xi 406, c7 (1706).

² Statute 6 Geo IV, c 72 (1825).

abolition of customs barriers and the harmonisation of tax regimes between the two countries.³ A pair of papers by Dr Athol Murray, published in 1997 and 2002, stands as the sole exception.⁴ But as detailed numismatic studies of the re-coinage process, Dr Murray's papers had no reason to touch on the constitutional significance of the union or on the technical questions of law raised by it. The historians' silence can be partly explained by the relative dearth of the contemporary documentary sources related to Article XVI. That paucity of evidence matches the slight attention that the English and Scottish Commissioners who negotiated the Treaty gave to the question of monetary union. Compared with the other economic issues that occupied them, the incorporation of Scotland into the English monetary system did not seem to strike them as contentious.

The present article attempts a legal history of the 1707 monetary union. The task requires a contextual interpretation of Article XVI but, more especially, a fine analysis of the accounting and administrative documents that implemented the union as a numismatic process. Only when these are understood do the legal questions emerge from the interstices. Those questions depend as much on the complex arithmetic of metal-based monetary valuation as they do on large constitutional questions of monetary sovereignty.

Section B of the article considers the wording of Article XVI against the background of early eighteenth-century understandings of money. Section C turns to the monetary coordination between Scotland and England after the regal union of 1603. Article XVI only makes sense when read against the hundred years of Scottish monetary regulation that preceded it. This sheds light on why the Scottish and English commissioners who negotiated the union might have found the merger of their monetary systems an uncontentious step to take. Section D considers the heterogeneous state of the circulating coinage in Scotland in the decades before 1707 and the legal measures needed to make it work as a single currency system. Section E describes how the monetary systems of Scotland and England were actually combined. The transition from the old to the combined system raised legal problems that the union Commissioners and mint authorities deftly avoided. Section F considers the aftermath of the

³ A selection of the main works includes J MacKinnon, *The Union of England and Scotland: a Study of International History* (1896); P W J Riley, *The Union of England and Scotland: a Study in Anglo-Scottish Politics of the Eighteenth Century* (1978); B Levack, *The Formation of the British State* (1987); C A Whatley, *The Scots and the Union*, 2nd ed (2014). The legal historiography concentrates on the preservation of Scots law within the constitutional structures of the union: J D Ford, "Four Models of Union" [2011] JR 45; J D Ford, "The Legal Provisions in the Acts of Union" (2007) 66 CLJ 106.

⁴ A Murray, "Sir Isaac Newton and the Scottish re-coinage, 1707-10" (1997) 127 *Proceedings of the Society of Antiquaries of Scotland* 921; republished with adaptations as A Murray, "The Scottish Re-Coinage of 1707-9 and its Aftermath" (2002) 72 *British Numismatic Journal* 115.

monetary union, which casts some light on the different degrees of legal coordination that are possible between countries that link their currencies in an international system. In that way, the article adds to the emerging literature on the economic history of monetary integration.

One theme in that literature is the relationship between political and monetary union between states. Political union usually requires monetary union. But states that prefer to avoid the full consequences of political union they may nonetheless accept some measure of monetary integration to facilitate the trade relations between them.⁵ One reason why the monetary union of 1707 seemed uncontentious is that it was incidental the more difficult question of political union between the two kingdoms. Unlike the formation of the euro-area nearly 300 years later, it did not involve the cession of monetary sovereignty by states that, notionally at least, retained their political sovereignty. The main effect of the arrangements implemented in 1707 was simply to rebase the monetary standard of the currency in Scotland with the currency in England, which had been the goal of the Scottish monetary authorities for at least a century. The study reveals that the legal conception of monetary union means different things in different historical periods. Modern-day legal understandings of monetary union – with their emphasis on the establishment of a common unit of account and a central bank – cannot be projected into the past.

B. ARTICLE XVI, “REAL MONEY” AND “IMAGINARY MONEY” BEFORE 1707

We begin with Article XVI of the two Acts of Union and explain some of the monetary background to it. The provision was identical in the two statutes. It was remarkably brief, one short phrase being enough to provide for the monetary union: “That, from and after the Union, the Coin shall be of the same Standard and Value throughout the united Kingdom, as now in England”.⁶

⁵ Much of the economic history of monetary unions has been inspired by the introduction of the euro: eg, M Bordo and L Jonung, *Lessons for EMU from the History of Monetary Unions* (2000); L Einaudi, *Money and Politics: European Monetary Unification and the International Gold Standard (1865-1873)* (2001); J Chown, *A History of Monetary Unions* (2003); P L Cotterell, G Notaras, G Tortella, *From the Tetradrachm to the Euro* (2007).

⁶ Art XVI read in full: “That, from and after the Union, the Coin shall be of the same Standard and Value throughout the united Kingdom, as now in England, And a Mint shall be continued in Scotland under the same Rules as the Mint in England, And the present officers of the Mint continued subject to such Regulations and Alterations as Her Majestie, Her Heirs or Successors, or the Parliament of Great Britain shall think fit.” The 1707 re-coinage was the last task undertaken by the Scottish Mint, which then fell into disuse. For its later history, see A Murray, “Sir Isaac Newton and the Scottish re-coinage, 1707-10” (1997) 127 *Proceedings of the Society of Antiquaries of Scotland* 921, 931-35.

(1) Coin as “real” money

The first legal question is why the Article XVI should be expressed in terms of “Coin”. In 1707 coins minted from precious metals remained the foundation of the Scottish and English monetary systems so the word “Coin” could be used as a practical synonym for “money”. But the reference to “Coin” has a deeper significance which only becomes apparent if Article XVI is read by the usage of its own time. The reference to “Coin” shows that the provision was solely concerned with what was called in eighteenth century “real” rather than “imaginary” money.⁷ It was concerned with the very *res*, the things put into circulation as means of payment. Imaginary money was the term used to describe the modern concept of a monetary unit of account.⁸ It was the counting system used to express the value of prices, debts and real coins.

Real money consisted of coins struck from intrinsically valuable precious metals. It functioned as money rather than bullion because the King ascribed to each denomination of coin an official value in the local money of account. Scots law, in common with all other Western systems, recognised the right to strike coin and to ascribe it a monetary value as pertaining exclusively to the sovereign.⁹ Thomas Craig’s *Jus Feudale* (c 1600) considered the legal process of monetary valuation and the discharge of debts as part of his chapter on the regalia of the King.¹⁰ Legislation on coinage came from the Estates in Parliament or from the King’s Privy Council. Coins struck in the King’s own mints and proclaimed at an official

⁷ A Justice, *General Treatise of Monies and Exchange* (1707), 1-2. The distinction was most fully developed to explain the monetary systems of continental Europe during the Middle Ages. The multiplicity of mints, all issuing their own coins to different intrinsic standards, necessitated the adoption of counting systems to calibrate their monetary values into common units. See generally L Einaudi, “The Theory of Imaginary Money from Charlemagne to the French Revolution”, ch 14 in F C Lane and J C Riermiersa, *Enterprise and Secular Change* (1953); Denzel, MA, *Handbook of World Exchange Rates, 1590-1914* (Farnham: Ashgate, 2010), lviii-lxi.

⁸ C Proctor, *Mann on the Legal Aspect of Money*, 7th ed (2012), 1.49-1.51, 2.37-2.42 (“Mann (2012)”).

⁹ The earliest legal source is the rescript of the Emperor Constantine dated to 326 AD: C.9.24.2. The rescript protected the exclusivity of the Emperor’s mints by punishing offenders who produced false money. For recognition of the prince’s *ius cudendae monetae* in the late medieval *ius commune*, see eg, Johannes Aquilae, *De Potestate et Utilitate Monetarum Tractatus Perutilis* (1516), cap I; Franciscus Curtius, *Tractatus Monetarum Practabilis et Utilis* (1482), cap I, all of which are compiled in Rennerius Budelius, *De Monetis et Re Numaria Varii Tractatus*, I, IV, pr (1591). The right was explicitly recognised in English common law in *Gilbert v Brett* (1604) Davis 18, although it was observed in practice for centuries beforehand.

¹⁰ Thomas Craig, L Dodds, (ed), *Jus Feudale Tribus Libris Comprehensum Book I* (2017) 64 Stair Society Annual Volumes (2017), I.16. 21 (at p 477) (“Craig, *Jus Feudale*”).

money of account value had a special status in law as the King's "proper money".¹¹ The public was legally obliged to accept them at the rates fixed in the proclamation.

It also lay in the King's prerogative to raise or lower the value of his own proper money. He could adopt foreign coins into the local monetary system by proclaiming that they would pass at official rates in Scots money of account. This was a common practice internationally. It was especially prevalent in Scotland during the seventeenth century where the total stock of real money comprised a great diversity of coins, both foreign and locally-minted.¹²

(2) "Imaginary" money or money of account

"Imaginary" money was the name given to abstract systems of counting units. Before 1707 Scotland used two main systems of money of account. One was a version of the *libra* system based on the pound unit. The *libra* system was used in England and in most European countries,¹³ although the Scots and English methods of counting the *libra* units differed. Each pound (*libra*, abbreviated to *l*) was divisible into 20 units of one shilling (*solidus* or *s*), which were then divisible into 12 units of one penny (*denarius* or *d*). Alongside this was the merk, one unit of which corresponded to two thirds of a pound, and was equivalent to 13 *s* 4 *d* or 160 *d*.

The *libra* system of pounds, shillings and pence was the more commonly used of the two. Government agencies in Scotland used it for keeping their accounts,¹⁴ and the Scottish mint and Privy Council used it for ascribing official values to coins. The advantage of having a parallel system of counting in merks was that sums could be expressed in clean units corresponding to 1/3 or 2/3 fractions of a pound. It is apparent from some entries in the government accounts that certain customary dues were levied in merks even when they were recorded as the corresponding sum in pounds.¹⁵ A sum of 6 *l* 13 *s* 4 *d* or 33 *l* 6 *s* 8 *d* in government accounts must have been reckoned by the parties as a clean sum of 10 or 50 merks. Customary rents tended to be quoted in merks, a practice that continued long after the union.¹⁶

¹¹ Eg, APCS, Charles I, LXXIV (11 February 1636) *RCS*, vol 2, 49; APCS, Charles I, LXXVIII (21 July 1636) *RCS*, vol 2, 51.

¹² See section D.

¹³ See Einaudi at n 7 above and for its origins P Spufford, *Money and its Use in Medieval Europe* (1988), 33-34.

¹⁴ See, eg, NRS E27/11, "Accounts of the Receiver General" (1688-1691).

¹⁵ *Ibid*.

¹⁶ See section F.

Different counting systems could be applied to the same debts and coins. Alexander Justice, the early eighteenth-century English writer on foreign exchange, noted that the Scots in fact kept their accounts “in three several ways”: Scots pounds, shillings and pence; Scots merks; and English (or sterling) pounds, shillings and pence.¹⁷ Although the nominal units used in the Scots and English *libra* systems were the same, the values they expressed differed by a factor of 12. Twelve pounds Scots corresponded to one pound sterling, and one shilling Scots to one penny sterling. (The legal and numismatic basis for this equivalence is considered later.¹⁸) The practices of the Bank of Scotland, which was founded in 1695, bear out this practice. The Bank’s capital subscriptions were raised in sums of Scots pounds but the Bank accounted for them in sterling in its own books.¹⁹ From the start all its other accounts were kept in sterling too,²⁰ as was its correspondence with borrowers and its business for remitting bills to and from its London agent.²¹ The Bank’s records run seamlessly in sterling before and after the union of 1707.

Contrary to what might be thought, the 12:1 conversion rate between the Scots and English money of account systems was not the exchange rate between the two countries’ real monies in circulation. If the Bank of Scotland handled sterling coins, as it often did between 1695 and 1707, then it would accept them at their current proclaimed value in pounds Scots and then divide that sum by 12 to reach the proper sterling money of account value for entry in its books. The best example of this practice is the way the Bank would have accounted for an English Crown piece. The Crown was current in England for 5 *s* sterling. Throughout the 1690s, its proclaimed value in Scotland alternated between 60 and 65 *s* Scots. The Bank was legally bound to accept Crowns at whichever of those rates was current at the time. It would enter one twelfth of that amount as the corresponding sterling sum in its books. The sum would have been different from the sum representing the same quantity of Crowns entered in the books of an English bank. The practice of denominating prices and debts in multiple money of account systems continued for many decades after the union.²²

Surprising as it may now seem, the one thing that Article XVI did not do was to define a new unit of account for Scotland or for the newly-constituted United Kingdom of Great

¹⁷ Alexander Justice, *General Treatise of Monies and Exchange* (1707), Tit IV, 92-93.

¹⁸ See section C.

¹⁹ BOS GB1830 3/1/1/1 (8 November 1695).

²⁰ BOS GB1830 BOS/4/4/1/1 (General Ledger 1696-1703).

²¹ There are many examples in BOS GB1830/ BOS/2/2/9/1 First Official Letter Book (1696 – 1711).

²² See section F below.

Britain. It refers nowhere to “the pound sterling”. The scheme implemented by Article XVI differed from what would now be expected of a full monetary union. Nowadays, legislation implementing a monetary union typically defines the new monetary unit of the combined currency system to distinguish it from the former units that it replaces. The euro is the obvious example.²³ Article XVI was silent on the unit of account. Its purpose was only to rebase the intrinsic content of the coinage in Scotland against the Scots and sterling units of account systems. To understand why we must begin a century earlier with the monetary policy settled between England and Scotland in 1604.

C. MONETARY COORDINATION BEFORE 1707

(1) Coordinating the Scots and English currencies after the the regal union of 1603

The full assimilation of the Scots with the English coinage in 1707 was the final stage in a process which was at least a century old. It began in 1603 when James VI of Scotland became King James I of England, succeeding Elizabeth I, and established a regal union between the two kingdoms. In the century that followed, the Scottish Privy Council managed the Scottish coinage as part of a coordinated currency network with England. This was the one lasting element of James VI/I’s failed attempts, soon after his arrival in England, to establish a political and economic union between the two countries.²⁴ If the full terms of his proposed union had come to be, there might have been a free trade and common customs area operating between England and Scotland long before 1707. As it was, the longer list of proposals contained in the Instrument negotiated between Scots and English Commissioners for union in the autumn of 1604 came to nothing. They failed to win support when they were debated in the English Parliament two years later, a result which the Parliament of Scotland seemed content to accept.²⁵

The coordination of the two currencies only succeeded because it was implemented through the King’s prerogative powers over the coinage, independently of Parliamentary control. The King’s reasons had little to do with efficient cross-border trade (although he

²³ See *Mann* (2012), ch 24, and Council Regulation (EC) No 1103/97 of 17 June 1997 for the establishment of the euro.

²⁴ See B Galloway, *The Union of England and Scotland 1606-1608* (1986); and B Levack, *The Formation of the British State* (1987).

²⁵ Galloway (1986), 93-136.

managed to make some short-lived relaxations in customs duties on English imports to Scotland).²⁶ Rather, the attempts to unite the currencies symbolised his aspirations for unity in the outwards signs of government and for an end to division between the two nations. The naming and inscriptions on the King's first issue of coins demonstrated his commitment.²⁷ The issue included denominations called the "Unite" with the inscription *Faciam eos in gentem unam* ("I shall make them one people") and the "Crown Britain" inscribed *Henricus Rosas, Regna Jacobus* ("Henry [VII] united the Roses [the formerly warring English royal Houses of Lancaster and York], James [VI/I] united the Kingdoms").

What precipitated the coordination of the currencies was the King's immediate need to spend the Scots coins that he and his courtiers brought with them on their southward progress towards London. Within days of his accession to the English throne, the King proclaimed that the gold 6 *l* Scots piece and the silver merk piece (13 *s* 4 *d*) should pass current in England according to their intrinsic values of 10 *s* and 13 ½ *d* sterling.²⁸ The larger problem he faced was the disparity in the rating of gold and silver coins between the two countries. At the start of the seventeenth century, Scotland applied the usual international bimetallic standard of 12:1 in valuing gold coins against silver coins, while England enforced a ratio of 10.75:1. By international standards, English gold coins were undervalued in terms of their intrinsic content.

(2) The conference of the mint officers in 1604

The King's response was to order a conference between the senior officers of the Scottish and English mints, which took place at the Tower mint in London in 1604. It ended in an agreement containing six articles, dated October 1604.²⁹ The agreement is headed as the note of a "conference". It established a definitive comparison between the monetary standards of the two countries based on careful measurements of weight and fineness in the coinage. Among other things, the mint officers established the difference in weight between the Troy ounce in Scotland and England. Although each country used the same unit, the Troy ounce in England

²⁶ S Lythe, "The Union of Crowns in 1603 and the Debate on Economic Integration" (1958) 5 *Scottish Journal of Political Economy* 219, 221-222.

²⁷ Galloway (1986), 59-60, 82.

²⁸ Proclamation, James I (England) 3 (3 April 1603).

²⁹ NRS RH4/69/2/2, 3 "Minute of the Conference and tryell betwix the Moneyers of England and Scotland be the officers of the Mintes and Coniziehouses" (1604).

was heavier than the ounce in Scotland by $8\frac{3}{4}$ grains English.³⁰ Two sample Scots coins – the gold 6 l piece and the silver merk piece – were assayed and weighed so that their value could be ascertained in terms of English weights. The agreement resolved that the merk piece should remain current in England at $13\frac{1}{2}d$, and that the existing Scots gold to silver ratio of 12:1 should continue.³¹ It contemplated that the King’s first issue of his own coins would circulate as legal tender in both countries and that it would replace the existing Scots coinage.³²

The agreement did not record any resolution about the future standard of the coinage. But the mint officers clearly expected that the coins in England and Scotland should be of the same fineness thereafter. After the conference, the London mint produced two indented trial plates, one made to the sterling standard of 11 oz 2 dwt (92.5%) fine and the other to the Crown gold standard of 22 carats (91.67%) fine.³³ Sections of it were deposited at the Treasury in Westminster and at the mints in London and Edinburgh to test the fineness of new coin issues.³⁴ This was done “[t]o the intent that no manner of difference of inequality, either outward or inward may hereafter be found in betwixt the saids moneys, But an just and perfect uniformitie in all Respects”.³⁵

James VI/I’s first issue of coins came the following month in November 1604.³⁶ Gold and silver coins were struck at the Edinburgh and London mints according to the English standard. They were proclaimed at legal values setting the gold to silver ratio at 12:1, which brought the English ratio into line with the existing Scots ratio. The coins were legal tender in England and Scotland at proclaimed values in terms of the English and Scots moneys of account. Thus the “Britain Crown” piece was proclaimed to circulate in Scotland “for six pounds Scots money, and in England for Tenn shillings sterline”, a ratio of 12:1. The piece called the “silver crown” was to circulate in Scotland for 3 l Scots and in England for 5 s sterling, again a ratio of 12:1. Apart from some slight differences in impression, the coins were

³⁰ NRS RH4/69/2/2, 3, Article 1. Another purpose of the conference was to put on record the different units of weight used in England and Scotland: NRS RH4/69/2/4. The fractional portions of each country’s ounce were different. Thus the English ounce was divided into 20 pennyweight, each of 24 grains. The Scots ounce was divided into 12 pennyweight of 24 grains each.

³¹ NRS RH4/69/2/2, 3, Article 5.

³² Ibid, Article 4.

³³ Confusingly, the English silver standard was usually expressed in the mint records of the 17th century as 11 oz 2 dwt fine and the Scots standard as 11 oz fine. This apparent discrepancy is explained by the different assay methods used in each mint. The English method represented the proportions of fine silver to copper when they were commixed in the melting pot, while the Scots method represented the proportions “out of the fire”, after the smelting process. 2 dwt silver was routinely lost when impurities were drained away. See C E Challis, *A New History of the Royal Mint* (1992), 262-266.

³⁴ For a diagrammatic representation, see NRS RH4/69/2/5 (“Note of English and Irish Standards”).

³⁵ APCS, James VI, CIX (15 November 1604), *RCS*, vol 1, 210, 210.

³⁶ Proclamation, James I (England) 47 (16 November 1604); Proclamation (Sc) 110 (15 November 1604), 210.

physically identical.³⁷ They were put into currency by separate English and Scots proclamations, proof of the constitutional separation that remained between the monetary systems of the two countries.

(3) The 12:1 money-of-account ratio and co-ordination of the two currency systems

The 1604 issue of coins established the 12:1 ratio between the units of account of Scotland and England which became a familiar feature of Scottish monetary reckoning for the next two hundred years.³⁸ The two sets of units, each expressed in pounds, shillings and pence, were alternative systems for counting coins.³⁹ They could be aligned with each other in a 12:1 relationship because the 1604 proclamations assigned the two money of account systems to the very same coins. 12:1 was not necessarily the exchange rate between the Scots and English currencies. The 12:1 ratio represented the intrinsic par of exchange between the two currencies only so long as they kept the same standard of fineness and weight, and the Scots and English monetary authorities raised or lowered the proclaimed values of their coins in step with each other.

Before the civil war, the aspiration of uniformity between the two currency systems remained strong. In the 1630s the General of the Scottish Mint, John Acheson, could speak in a report to Privy Council of “a union of [His] Majesties moneyes to have course betuix England and Scotland”. He made his argument during a debate over the minting of a new issue of copper token coins.⁴⁰ He argued for a correspondence with England in the copper coins just as already existed with the gold and silver coins.⁴¹ In 1632 the newly-appointed Master Moneyer, Nicholas Briot, proposed raising the legal value of the Scots coinage relative to the over-valued Imperial silver dollars circulating in Scotland.⁴² In opposition to the proposal, the burghs expressed their understanding that the Scots money was “ordained” to conform in weight and fineness to that of England.⁴³ George Fowles, the Master Coiner of the mint, argued that any alteration to the Scots standard needed the consent of the estates of England. Otherwise it

³⁷ For the differences, see E Burns, *The Coinage of Scotland* (1887), vol 2, 414-15.

³⁸ See section F below.

³⁹ See section B above.

⁴⁰ APCS, Charles I, XL, (18 November 1630), *RCS*, vol 2, 21.

⁴¹ APCS, Charles I, XLIV, (26 August 1631), *RCS*, vol 26.

⁴² APCS, Charles I, CXIX, (June and October 1632), *RCS*, vol 2, 80.

⁴³ APCS, Charles I, CXXII, (January 1633), *RCS*, vol 2, 84

would be contrary to the “contract of union” between the two countries.⁴⁴ When in 1636 Briot proposed to introduce his new press for inscribing counterfeit-proof edges on Scottish coins, he encountered opposition from members of the Privy Council. Their opposition was doubtless grounded in local suspicion of a technical innovation promoted by a foreigner but their stated reason was that this new technology had not yet been introduced in England, which would make a clear “difference in the print of the coyne of this kingdome from that of England to the breache of the compromitt”.⁴⁵

Over the next century, the actual uniformity in standard between England and Scotland lapsed. At the start, the monetary authorities kept the standard closely in line. When James VI/I raised the official values of the 1604 gold coins to allow for the increase in international gold prices, he raised them in step in Scotland and in England.⁴⁶ His second coinage of 1609 and Charles I’s first coinage of 1625 kept the same standard of weight and fineness as the 1604 issue. The coins were struck in denominations corresponding to round-number money of account sums in Scotland and England.⁴⁷ After Charles I’s second coinage of 1636 the correspondence became less obvious. Scots coins were struck in denominations of the merk unit which corresponded less neatly with the *libra* system of reckoning in pounds, shillings and pence used for English coins.⁴⁸ The debased coinages issued during the civil war interrupted the continuity in the standard. The trial plates in Edinburgh were lost.

After the restoration of Charles II in 1660, it was assumed that the monetary coordination between England and Scotland should continue as before, even as other proposals for a deeper economic union came and went, and the two countries adopted trade policies that became increasingly protectionist.⁴⁹ A new set of trial plates based on the English standard was produced for the Edinburgh mint in 1663. Despite this commitment, within twenty years of the restoration the fineness of the Scottish silver coinage declined markedly from the sterling standard of fineness, owing to manipulations by the General of the Scottish Mint, Lord Hatton.

⁴⁴ APCS, Charles I, CXXIII, (January 1633), *RCS*, vol 2, 88.

⁴⁵ APCS, Charles I, LXXVI, (11 June 1636,) *RCS*, vol 2, 49. The Privy Council eventually changed its mind and allowed the new coinage to be struck by the milled press: APCS, Charles I, LXXXVII (12 January 1637), *RCS*, vol 2, 55. For Briot’s career in Scotland, see E Burns, *The Coinage of Scotland* (1887), vol 2, 445-452.

⁴⁶ Proclamation (England) James I, 122 (23 November 1611); APCS, James VI, CXIV, (26 November 1611), *RCS*, vol 1, 220.

⁴⁷ James VI/I second issue of 1609: 60 s, 30 s, 12 s, 6 s silver pieces; Charles I first issue of 1625: 60 s, 30 s, 12 s, 6 s, 2 s, 1 s, ½ s pieces. See J D Robertson, *Handbook to the Coinage of Scotland* (1878), 89-90.

⁴⁸ *Ibid*, 91 ff.

⁴⁹ On proposals for economic and political integration in 1668 and 1670, see C Jackson, “The Anglo-Scottish Union Negotiations of 1670”, ch 2 in T Claydon and T Corns (eds), *Religion, Culture and National Community in the 1670s* (Cardiff, 2011).

Hatton was accused of extracting more than his due share of the bullion sold to the mint for coining.⁵⁰ He was dismissed in 1682, and his coins withdrawn from circulation. The sterling standard of fineness was reinstated for the silver coinages of James VII/II, William and Mary, and Anne. Even so, their Scottish coins were lighter than the corresponding English coins so a difference in intrinsic standard remained. The difference is most obvious in the 60 *s* Scots Crown, which under James VII/II and William and Mary weighed 427 grains compared with 464.516 grains under James VI/I.⁵¹ This was a difference of 0.081, close to 1/12.

By the time of the 1707 union, the intrinsic par of exchange between Scotland and England was generally acknowledged to be 13:1. This represented a fall of 1/12 or 0.0833 against the historic par of 12:1 established in 1604.⁵² The difference was studied by Sir Isaac Newton, who was the Warden and then Master of the Royal Mint in London (1696-99, 1699-1727), as part of wider investigation into the intrinsic parities between sterling and a great variety of European coins.⁵³ He weighed and assayed a series of silver Scots coins minted between 1673 and 1695.⁵⁴ Apart from the period of deterioration during Lord Hatton's tenure as General of the Scottish mint, the fineness of the silver coinage generally stayed at the sterling standard of 11 *oz* 2 *dwt* fine. But all of these coins were below the weight that would have been predicted if the intrinsic parity of the Scots to the sterling monetary units had stayed constant at the 12:1 ratio. Thus the Scots 40 *s* silver piece minted between 1689-1694, which would notionally have been accounted for at 40 *d* sterling (or 3 *s* 4 *d*), was found to be worth 36.67 *d* sterling (3 *s* 2/3 *d*). This was deficiency of about 3 1/3 *d* for every 40 *d*, corresponding to 0.082 or nearly 1/12. Newton speculated that this reduction in the weight of Scottish coins was a deliberate policy to discourage the public from melting them for bullion.

D. THE CIRCULATING COINAGE IN SCOTLAND BEFORE THE UNION

(1) The variety in the circulating coinage

⁵⁰ "Report of the Commissioners Appoynted for tryall of the Minte of Scotland", APCS Charles II, LXXIII, (4 August 1682), *RCS*, vol 2, 186.

⁵¹ The weights, fineness and denominations of the coin issues are summarised in J D Robertson, *Handbook to the Coinage of Scotland* (1878), 87-104.

⁵² W A Shaw, *Select Tracts and Documents Illustrative of English Monetary History 1626-1730*, 2nd reprint (1935), 150.

⁵³ Collected *ibid*, Section IV "Sir Isaac Newton's Mint Reports".

⁵⁴ PRO MINT 19/3, fol 390 ("Account of the Scotch money" (1697)). See also fol 391 which proposes approximate English conversion rates for a series of Scots silver coins.

The efforts made to coordinate the Scots and English coinage systems during the seventeenth century were a small part in the whole picture of currency management before the 1707 union. The real money circulating in Scotland was made up of a great variety of coins. Of these “the King’s proper coin” – whether Scots or English – was only a part, with the rest comprising foreign coins brought into the country through overseas trade. This heterogeneous collection of coins used from day to day was coordinated by an official system of coin pricing. The Privy Council adopted foreign coins into the local Scots system by proclaiming them at an official value in Scots money of account. They passed at compulsory money of account rates on an identical legal footing with money struck by the Scottish mint.

The records of the 1707 re-coinage are informative – if incomplete – on the relative values of foreign and Scottish coin circulating in Scotland at the time of the union. The main business of the re-coinage was to call in and replace all the Scottish silver coins and the foreign adopted coins. Since the Scottish system was being assimilated into the sterling system, English coins already in Scotland continued to circulate as before.⁵⁵ The value of the Scottish silver coinage reminted at the union was £239,036 sterling, compared with £132,080 of foreign coin from countries other than England.⁵⁶ This total sum for foreign coins conceals a great diversity of coin types. The mint records describe them generically as “dollars” and “ducatoons”.⁵⁷ They were probably various issues of *reichsthaler* minted by the territories of the Holy Roman Empire (and known in Great Britain as “rixdollars”), and ducatoons minted by states in and around the Netherlands. At their most recent rating before the union they were proclaimed to circulate at 58-60 *s* Scots, and 74 *s* Scots respectively.⁵⁸ All these coins were in different degrees worn or clipped. Their intrinsic value as bullion was highly variable, and was likely to diverge from any official value in Scots pounds assigned to them by proclamation.⁵⁹

⁵⁵ See section E below.

⁵⁶ BOS GB1830 BOS/2/6/1/1, “Note of the whole species recoyned in Scotland conform to the Articles of Union”.

⁵⁷ RBS CEQ/53/3, “Accompt of the foreign and Scotts money melted down at the mint” (10 February 1709).

⁵⁸ See APCS, William II, XXXIII (12 July 1695), *RCS*, vol 2, 250. Newton compiled a long list of foreign coins, including various dollars and ducatoons, commonly met in British trade early in the eighteenth century. See W A Shaw, *Select Tracts and Documents Illustrative of English Monetary History 1626-1730*, 2nd reprint (1935), 140-143.

⁵⁹ This degree of variation in weight is apparent from records of the loss incurred when foreign coins were called in, and which then had to be compensated from the Equivalent. Foreign coins were received at nominal sterling rates in batches of £3000 sterling each. But the silver weight corresponding to each nominal amount was variable so that different amounts of compensation had to be paid for each batch: see BOS GB1830 BOS/4/4/1/2 Bank of Scotland General Ledger 1703-1710, fol 58, 1707 “The Commissioners of the Equivalent Debit”, and 1707 “Commissioners for the Mint” Debit, fol 66, noting particularly different weights of the coins delivered under certificates 15 and 16.

The total value of the English silver currency in Scotland at the time of the union has to be inferred from a different source. The English silver currency did not need to be called in for reminting but it did need to be revalued to ensure that it would circulate on par with the rest of the new sterling coins issued in the re-coinage. The records indicate that in all £35,841 sterling in English coins were put back into circulation at their new rate.⁶⁰ On that measure, there was about 407,000 *l* sterling of silver coin in Scotland at the time of the union, made up in proportions of 59% Scots: 32% foreign: 9% English.

The re-coinage records give no indication of the value of gold coin in circulation. There is reason to think that the gold coins were either foreign or English, and that hardly any of the gold coins previously minted in Scotland were still in use by the beginning of the eighteenth century. Gold was conspicuously absent from the re-coinage process, as if to imply that there was none that needed to be called in and re-issued as English guineas. The last substantial issue of gold coins in Scotland was by Charles I in 1637, with another small issue under William II/III in 1701 made from gold dust brought back from Darien by the Company of Scotland.⁶¹ Scots merchants probably used English guineas for high-value payments.⁶² In England during the early 1690s, the market price of the guinea was allowed to float relative to the silver coinage, and this was probably allowed in Scotland too.⁶³ The evidence for this practice is the absence of any proclamations by the Scottish Privy Council seeking to fix a legal value of the guinea in Scotland in terms of Scots pounds. They were, however, assiduous about fixing the value of English silver coins to maintain their real parity with Scots silver coins. After the union, guineas circulated in Scotland at rates fixed by legislation of the Westminster Parliament and by proclamation.⁶⁴

(2) Rating the circulating coins in Scots money of account

⁶⁰ RBS CEQ/53/6, “Abstract on the Loss of the English Mill’d Money”.

⁶¹ E Burns, *The Coinage of Scotland* (1887), vol 2, 519-21; J D Robertson, *Handbook to the Coinage of Scotland* (1878), 31-32.

⁶² See GB1830 BOS/2/6/1/1 which leaves blank the figures for English money and gold coin in Scotland at the Union. As to gold it notes: “Also the gold being then in great plenty it may be supposed that there was in Guineas and other gold —”.

⁶³ See M-H Li, *The Great Recoinage of 1696-9* (1963), 10-11.

⁶⁴ Statute (England) 7 & 8 William III, c 19, s 12 (1696) (effective 10 April 1696) set the maximum value of the guinea at 22 *s*, until it was lowered to 21 *s* by Proclamation (22 December 1717), George I, NA MINT 1/1, fol 212. 21 *s* remained the maximum value of the guinea until it was replaced by the sovereign coin in 1817.

The task of arranging this mixture of coins into a coordinated national currency fell to the Scots Privy Council acting on advice from the officers of the mint. For example in 1677, a long list of foreign coins was adopted into the Scots system at rates fixed by a proclamation of the Privy Council.⁶⁵ True, this was not the first time that the Privy Council had adopted foreign coins. But the 1677 proclamation seemed to be a comprehensive attempt to re-base all the coins in circulation to a consistent value. Although the Privy Council preferred to see as much Scottish coin in circulation as possible, it recognised the advantage in encouraging merchants to bring foreign coins home with them. It was better that they import foreign coin than fill their ships with foreign commodities “of lesse use for this Kingdom to ballance the whole export”. In 1695 the Privy Council proclaimed another general uprating of the foreign coins. It re-fixed their value in Scots money of account until they were all eventually called in and replaced with sterling coins after 1707.⁶⁶

There was nothing unusual about Scotland having a real money system made up of so many different local and foreign coins. This had been a common experience in continental Europe since medieval times. It was, however, difficult to calibrate them all into a coordinated system. A par needed to be kept across the different coins internally in Scotland and then held against the rates set in foreign countries. Throughout the seventeenth century, England had a far more homogeneous system of real money. More of the coin in circulation was the King’s proper coin struck at his own mints. This was long-established. From medieval times, the English Parliament had legislated to exclude foreign coins which were seen as a threat to local monetary stability, and for a time only English coins struck at the King’s mints were permitted to circulate.⁶⁷

Maintaining the par with the English currency was a special problem. As we have seen, by late in the seventeenth century the actual par of exchange had slipped from 12:1 to 13:1. The parity with England became particularly vexed in 1690s during the re-coinage of the English silver currency in 1696-99. By this stage the old unmilled English silver currency was in a poor state. Most of it was underweight and clipped, and much of it was counterfeit. It became hard for the Privy Council to give it a reliable value in Scots money of account.

⁶⁵ Proclamation LX (Sc) Charles II (27 February 1677), 169.

⁶⁶ Proclamation XXXIII (Sc) William II (12 July 1695), 250.

⁶⁷ Statute (England) 2 Henry IV, c 6 (1400), although other statutes and proclamations followed which banned new incursions of foreign coin and adopted certain others. R Kelleher, “‘Gold is Strength, the Sinews of the World’: Continental Gold and Tudor England” (2007) 77 BNJ 210, 220 notes that 8.8% of the coins in mixed hoards of the Elizabethan era were foreign in origin. This frequency declined in the seventeenth century: E Besley, *English Civil War Hoards*, *British Museum Occasional Paper No 51* (1987), 62.

The complexity of the real monies circulating in Scotland late in the seventeenth century provides the background to 1707 monetary union. The most obvious achievement of the union was to simplify the variety of coins and to reduce the need for the repeated coordination of their money of account values. So far as the aspiration of the 1604 agreement remained real – that Scotland and England were to have the same monetary standard – the simplest way to achieve this was to have the same coins either side of the border. The following sections consider how that was done.

E. IMPLEMENTING THE UNION

(1) Currency conversion and implementation of Article XVI

Article XVI required that from and after the union the coin should be of the same standard and value throughout the entire United Kingdom as was then in circulation in England. It aimed to replace the silver real monies circulating in Scotland with coins minted to the sterling standard. But Article XVI was completely silent about how the conversion from the Scots to the sterling standard was to happen. That has to be inferred from the documents initiating and recording the re-coinage. The closest we have is a “Report of the Committee anent the Coin” (1707) presented to the Parliament of Scotland shortly after it voted to accept Article XVI. It proposed:

The Commissioners of the Equivalent should be Ordained how soon soever the sums for the Equivalent shall be lodged in their hands to receive in all sums of money consisting of Money that hath passed the mint of this Kingdom and all Forreign species (except English money) current within in this kingdom and shall immediatly cause pay out of the Equivalent in English money at five shillings per Croun the equall sum in taile to what was paid in of the foresaid money presently current in Scotland to the person who payd in the said Scots money.⁶⁸

The Report contemplated that the re-coinage would happen by conversion of the currencies at their money-of-account values based upon the old 12:1 rate of conversion between the Scots pound and pound sterling units. This was what it meant to say that those who paid in the old Scots coins were to receive “the equal sum in taile” in sterling coins. The difficulty was that

⁶⁸ APS, Anne, V (11 February 1707), *RCS*, vol 2, 284.

the 12:1 money-of-account conversion was out of line with the 13:1 intrinsic difference between the real monies of the two countries. The problem was as much legal as it was economic.

(2) The legal rules on currency exchange

From a legal perspective, the re-coinage of the Scottish currency fell somewhere between two established categories of transaction. First, it was not a straightforward currency exchange of the sort usually needed when two monetary systems combined in a union. The legal understanding in Scotland and elsewhere was that the rate at which one currency was sold to acquire another was primarily determined by the intrinsic par between them.⁶⁹ The exchange would have been fixed by the actual silver content of the two coinages relative to their money of account values. Had this been the basis of the re-coinage, then the holders of Scots coins would have received sterling coins nominally equivalent to 1/13 of their original holdings valued in pounds Scots. The conversion would also have required the redenomination of existing debts and prices expressed in Scots pounds and merks into pound sterling units. The re-coinage would have been neutral in terms of the purchasing power of the old and new coinages relative to debts and prices. The relationship between the intrinsic values of the coins and the money of account values in which coins, debts and prices were denominated would have remained unchanged. The conversion would have favoured neither debtors nor creditors.

But any redenomination of prices and debts would have led to them being expressed in uneven sterling sums owing to the actual 13:1 difference in the intrinsic values of the two currencies. Such a re-denomination would be expected when a monetary union was formed. This for example was the process adopted in 1999 when the former legacy currencies of the euro-area were locked into the new euro currency. Legislation irrevocably fixed the conversion rates between the euro and the currencies of the Member States adopting the euro. The rates of conversion were in uneven amounts expressed to six significant figures.⁷⁰ Debts or prices formerly expressed in the legacy currencies had to re-expressed as uneven sums of euros.

⁶⁹ For Scotland, see Craig, *Jus Feudale*, I.16.22 (at p 479); and Viscount Stair, *The Institutions of the Law of Scotland*, D Walker (ed), (1981), I.14.1 (“Stair, *Institutions*”). For England, see *Ward v Ridgwin* (1625) Latch 84, 84 per Doderidge J; *sub nom Ward v Kedgwin* (1625) Palmer 407, 407.

⁷⁰ Cf Article 1 of Council Regulation (EC) No 2866/98 of 31 December 1998 which irrevocably fixed the conversion rates between the euro and the currencies of the Member States adopting the euro. Before then there was no fixed parity between the euro unit and the units of account of the legacy currencies. The conversion was effected at what had come to be the market rate of exchange between them. See generally *Mann* (2012), ch 29.

But such a conversion would have worked clumsily in 1707 owing to the long-standing accounting practices used in Scotland. It would have disturbed the straightforward accounting practice of converting Scots to sterling monetary sums at a rate of 12:1. Conversion of debts and prices at an intrinsic 13:1 rate would have destroyed the Scots pound or merk as accounting units or at least made them very difficult to calibrate against the new coinage.

(3) The legal rules on payments after a re-coinage

A second way of analysing the re-coinage might have been to treat it as a new issue of coins with a different intrinsic standard but still within the existing system of Scottish money. It would then have operated like all the other recoinages in Scotland during the seventeenth century and that had recently been completed in England in 1696-99.⁷¹ The only difference from past experience in Scotland was that after 1707 the coinage was being enhanced in its intrinsic content relative to its money of account valuation. The previous century had seen the progressive debasements against the Scottish coinage, a process that Thomas Craig and later the institutional writer John Erskine both deprecated.⁷² The legal problem presented by the 1707 re-coinage might have been closer to that of the 1696-99 re-coinage in England where the old silver currency was entirely withdrawn and replaced by coins that were restored to their original, higher standards of weight and fineness.

The legal problem presented by such re-coinages was familiar enough in the rules of most civil law systems and of the common law. The problem brought into play the rules for the discharge of debts. If debts were still denominated in units of Scots pounds or merks, or pounds sterling after the re-coinage, the question was how many new sterling-denominated coins the debtor had to tender to get a discharge. The predominant opinion by the late seventeenth and early eighteenth centuries was that debts were paid according to the extrinsic value of the coins in circulation when they fell due for payment.⁷³ Coins had to be accepted at their legally proclaimed values rather than at their intrinsic value as bullion. The value of debts was measured in constant units of account rather than in notional quantities of bullion represented by them.

⁷¹ M-H Li, *The Great Recoinage of 1696-1699* (1963).

⁷² Craig, *Jus Feudale*, I.16.22; J Erskine, *An Institute of the Law of Scotland* (1773), II.3.14.

⁷³ For the medieval and early modern *ius commune*, see W Ernst, ch 7 and H Dondorp, ch 13 in D Fox and W Ernst, *Money in the Western Legal Tradition* (2016). For confirmation of the view in English common law, see *The Case of Mixt Monies (Gilbert v Brett)* (1604) Davis 18.

The learned law of Scotland waived on this point. Thomas Craig argued in his *Jus Feudale* (c 1600) that debts should always be repaid at their intrinsic value when they were first incurred. This would have placed the risk of debasement on the debtor.⁷⁴ Conversely, where the coinage was enhanced, as it was after 1707, the debtor would have paid fewer coins to be discharged from the debt. Craig's view no longer represented the legal orthodoxy in 1707.⁷⁵ Viscount Stair stated the reasons in his *Institutions of the Law of Scotland* (1681). He argued that money was merely a common token of exchange. Its value derived from an act of the state rather than from its material substance: "Lest the currency of commerce might be retarded upon debates of the intrinsic value of these metals, they have always been stamped by public authority, that they might be current amongst the subjects of that commonwealth".⁷⁶ He acknowledged that the old practice might have been to allow repayment of debts at the same intrinsic value:

But that was well altered by a posterior custom, allowing the current coin for the time, by the extrinsic value to be sufficient, in all redemptions, much more in personal contracts, which is most convenient, seeing money is regarded as the token of exchange, and as a fungible, not as a body.⁷⁷

According to Stair, a debtor made a good tender if the extrinsic value of the coins was equivalent to the money of account value of the debt. Applied to the 1707 re-coinage, this rule would have disadvantaged buyers and debtors, at least in intrinsic terms. If their holdings of Scots coins were converted to sterling coin at their equivalent intrinsic value, then the nominal value of the new coins would shrink relative to the fixed value of prices and debts. In nominal terms, buyers and debtors would be made poorer by the conversion. Conversely, sellers and creditors would be better off in intrinsic terms. The money of account value of their prices and claims would remain unchanged. But applying Stair's rule of debt repayment, the sellers and creditors could expect payment in heavier coins although those coins would bear the same money of account value as before.

⁷⁴ Craig, *Jus Feudale*, I.16.22.

⁷⁵ Craig was arguing from principle or personal preference, rather than from anything founded on legal practice. The terms of coinage warrants and proclamations issued by the Privy Council indicate that coins were expected to pass at their legally proclaimed values.

⁷⁶ Stair, *Institutions*, I.14.1.

⁷⁷ Stair, *Institutions*, I.11.5, citing D.18.1.1. Similarly in the Netherlands, Johannes Voet argued that when money was given on loan it was not so much the coins that were to be considered but the legally-decreed monetary amounts they represented: J Voet, J P Gane (ed), *The Selective Voet: Being the Commentary on the Pandects* (Durban, 1955-58), XII.I.24(iv).

(4) Funding by the Equivalent and conversion at the 12:1 ratio

The solution was to inject a fresh quantity of silver into the system. This allowed the conversion to proceed according to the 12:1 rate of exchange between the Scots and English monies of account, while shielding private parties – both debtors and creditors – from any risk of intrinsic or extrinsic loss from the replacement of the currency. The Scottish Commissioners who negotiated the union insisted on this point as a condition to the re-coinage at the sterling standard: “the Lords Commissioners for Scotland do agree to the [Article XVI] Provided that Consideration be had to the losses privat persons may sustain in reducing the Coyn to the same standard as now established in England”.⁷⁸ There were precedents for their argument. Since 1666 the practice in England was that the direct costs of minting coins should be borne by the state out of taxation rather than imposed on the private parties who sent bullion or old coins for minting.⁷⁹ This replaced the system of “free” minting where the individuals who supplied bullion for minting bore a small intrinsic loss to cover the mint’s costs and the King’s seignorage tax.⁸⁰ The English parliament extended the principle when it re-coined England’s silver currency in 1696. The direct minting expenses and any intrinsic loss arising from the re-coinage lay with the Exchequer.⁸¹

Accordingly, it was agreed that costs and losses of the 1707 re-coinage should be paid out of the Equivalent. The Equivalent was a fund of 398,085 / 10 *s* sterling sent to Scotland by the English government after agreement to the union. It notionally represented compensation due to Scotland for assuming its share of the English national debt. Its use as an inducement to the Parliament of Scotland to accept a full incorporating union with England has attracted more attention among historians of the union. The Equivalent was used to fund the expenses of the Scottish Commissioners who negotiated the union and to bail out the investors of the Company of Scotland after the disastrous failure of the Darien scheme in 1699.⁸² It was in effect the

⁷⁸ APS, Anne, III (21 June 1706), *RCS* vol 2, 283.

⁷⁹ Statute (E) (1666) 18 & 19 Car II, cap 5 (“An Act for encouraging of Coinage”).

⁸⁰ See A E Feaveryear, *The Pound Sterling* (1931), 88-89; and C Desan, *Making Money. Coin, Currency, and the Coming of Capitalism* (2014), 236-39.

⁸¹ Statute (England) (1695) 7 & 8 William III, cap 1; Statute (England) (1696) William III, cap 18.

⁸² See generally C A Whatley, *The Scots and the Union*, 2nd ed (2014), 273-276; D Watt, *The Price of Scotland: Darien, Union and the Wealth of Nations* (2007).

price given by England to secure the dissolution of the Company of Scotland as a trading enterprise with privileges to trade in the Americas and East Indies.⁸³

The importance of the Equivalent to funding the re-coinage has gone largely unnoticed.⁸⁴ It was hardly a conspicuous inducement to Scottish parliamentarians to accept the Treaty terms since the benefit was spread among all holders of silver coin in Scotland and might only have absorbed some 12% of the entire Equivalent fund.⁸⁵ But the injection of additional silver in the shape of money from the Equivalent was essential to the seamless union of the two monetary systems. The Equivalent gave all holders of Scottish and adopted foreign coins a quantity of silver equivalent to 1/13 of the official value of their money. The exchange of old Scottish coins for new sterling coins was made at the 1604 par of 12:1, with the Equivalent bearing the intrinsic loss of 1/13 in the exchange.

The effect of exchanging the coins at a 12:1 rate was that existing prices and debts could still be denominated interchangeably in Scots pounds or pounds sterling. Prices or debts did not need to be adjusted to allow for the circulation of the new coins. If, for example, a borrower in 1705 had taken out a five-year loan for 120 £ Scots advanced in old Scottish coin, then he would repay it in 1710 as 10 £ of new sterling coins. The sterling coins repaid would have been heavier by 1/13 than the Scottish coins he received in 1705. But the Scottish coins could have been exchanged for sterling coins during the re-coinage at the 12:1 rate, which would have cancelled out any intrinsic loss that the debtor might otherwise have borne in repaying the loan.

The conversion was even simpler for transactions that were not founded on the receipt of metallic coin. A customer who borrowed 120 £ from the Bank of Scotland in 1705 as ten 12 £ Scots notes could cash them with the Bank in 1710 for 10 £ sterling coin. This was the same sum that the Bank would have entered for the notes in its books in 1705. Even if sellers and creditors became slightly richer in intrinsic terms by the payment of the new sterling coins, they felt no difference. The nominal value of their money holdings remained unchanged. The neutrality of the process was particularly important since the entire re-coinage took two years to complete. Between August 1707 and October 1709, old Scottish coins still circulated alongside the new sterling coins.

⁸³ A Mackillop "A Union for Empire?", ch 7 in S J Brown and C A Whatley, *Union of 1707: New Dimensions* (2008).

⁸⁴ It earns just a brief note in Whatley (2014) at 274 and C A Whatley, *Bought and Sold for English Gold?* (1994), 48-59.

⁸⁵ The monetary value of the intrinsic loss on the re-coinage was 49,449 £, and the mint charges 439 £. See RBS CEQ 29/1 "Abstract of the Foreign and Scots Silver Money Melted down at the Mint in Edinburgh" recording the sums due from the Equivalent after the re-coinage.

(5) Replacing the existing coinage

The report of the Parliamentary Committee on the Coinage outlined the two main recommendations in the process of replacing the existing Scots coinage. They used a formula expressed in terms of the silver crown piece. We saw earlier how the Crown piece, originally valued at 60 *s* Scots and 5 *s* sterling, was established in the 1604 agreement as a “link” coin. It correlated the money of account systems of Scotland and England at 12:1,⁸⁶ and became the basic coin around which other denominations of coin were issued. The understanding in 1604 was that the linkage through the Crown piece would ensure that the intrinsic and extrinsic value of the coins in the two systems would keep step with each other. The purpose of Article XVI was to re-establish this correlation but in a system where the real monies in England and Scotland were identical in all respects.

The first recommendation of the Committee related to the conversion of the Scots and foreign adopted coin. It is worth repeating their recommendation:

The Commissioners of the Equivalent should be Ordained how soon soever the sums for the Equivalent shall be lodged in their hands to receive in all sums of money consisting of Money that hath passed the mint of this Kingdom and all Forreign species (except English money) current within in this kingdom and shall immediatly cause pay out of the Equivalent in English money at five shillings per Croun the equall sum in taile to what was paid in of the foresaid money presently current in Scotland to the person who payd in the said Scots money⁸⁷

The public received new coins at a money of account rate rather than at the intrinsic value of the old Scots coins they handed in. “[F]ive shillings per Crown” defined the rate of exchange coin for coin. For every 60 *s* Scots handed in 5 *s* sterling were paid out.

The Bank of Scotland acted as agent for the Mint and the Commissioners of the Equivalent in receiving old coins and distributed new sterling currency in return. The movement of funds between the three parties can be gathered from the Bank’s ledger accounts for 1707 and the records of the Commissioners for the Equivalent.⁸⁸ The Bank exchanged new

⁸⁶ See section C.

⁸⁷ APS, Anne, V (11 February 1707), RCS, vol 2, 284.

⁸⁸ BOS GB1830 BOS/4/4/1/2 Bank of Scotland General Ledger 1703-1710, fols 58, 66-68, 89-90, 92, 96-97, 100. For the Bank minutes authorising the process, see BOS GB1830 BOS/1/2/1/1, “Record of the Minutes of Court of Directors, February 1696-December 1725, 25 August, 4 September 1707”.

coins for old at the 12:1 money of account ratio. It despatched the old coins to the Mint in Edinburgh, usually in batches with a nominal sterling value of 3,000 *l* each. The Mint weighed and assayed them. Their intrinsic value was highly variable, particularly for the foreign coins which would have comprised a greater variety of denominations. The Troy weights recorded for each 3,000 *l* batch differed across a range of up to 10 per cent. The Mint bore this immediate 1/13 nominal loss and any additional intrinsic loss from the coins being underweight. The Mint then refunded the Bank for each batch of coins, plus its commission for handling the re-coinage. At the end of the process, the monetary loss incurred by the Mint was debited to the Commissioners for the Equivalent.

The Committee's second recommendation related to the English silver coins that had already been adopted into the Scottish system.⁸⁹ The plan was that these would continue in circulation, alongside the new sterling coins issued in the re-coinage of the Scottish and foreign money. The difficulty was that since 1697 the official value of English coins in Scotland was 1/13 greater than their nominal value in England.⁹⁰ English crowns circulated at 65 *s* Scots. After the union they needed to circulate at their original English value of 5 *s* sterling, equivalent to 60 *s* Scots. The Scottish holders of English silver coin would suffer a 1/13 nominal loss if their coins were simply called down to their original sterling values.

The Parliamentary Committee on Coinage recommended a special system to compensate the holders of English Crowns. A proclamation required them to present their Crowns to tellers in Edinburgh, Glasgow or Aberdeen on 17 April 1707.⁹¹ The tellers counted the coins, sealed them in bags, and returned them to the holders at the end of the day. The tellers gave the holders a certificate for the sum received and returned, which they then presented to the Commissioners for the Equivalent. The Commissioners paid them an additional 1/13 of the sterling value of the certificated amount, which equated to their nominal loss.⁹²

F. AFTER 1707

⁸⁹ See section D.

⁹⁰ APCS, William II, LVI, (23 January 1697), *RCS*, vol 2, 270. In the two years beforehand, the value of the English milled crown piece had been raised from and then lowered to 60 *s* Scots: APCS, William II, XXXIII, XLIII (Sc) (12 July 1695, 21 May 1696), *RCS*, vol 2, 250, 257. The foreign exchange value of the English silver currency must have varied as the English recoinage of silver progressed.

⁹¹ APCS, Anne, XXV (28 March 1707), *RCS*, vol 2, 291.

⁹² APS, Anne, V (11 February 1707), *RCS*, vol 2, 284. All payments of English money received and returned, together with the amount of the certificated loss, are gathered in RBS CEQ/53/6 "Abstract of the Loss on the Milled Money". RBS CEQ/29/5, 6 record the payments actually made by the Commissioners of the Equivalent to the holders of the certificates.

The principles of conversion by money of account rates and the compensation for intrinsic losses borne by the Equivalent allowed the seamless merger of the Scots monetary system into the sterling system. Article XVI achieved its stated purpose, which was to produce a coinage of similar standard across the whole United Kingdom as formerly applied in England. Very little changed in practice. Prices and debts did not need to be redenominated. The only observable difference was that the silver coins that people handled were the same as those in England. The money circulating in Scotland would have looked more homogeneous than in the past. The great array of foreign coins was replaced, and the elaborate schemes for calibrating and pricing foreign coins in terms of the local currency were no longer needed. Money minted in England or Scotland could circulate at identical rates in either country, without the need for any adjustment owing to intrinsic differences between them.

To all outward appearances the events of 1707 looked like the completion of a monetary union and by modern legal standards that is what it was. Each country ceded its monetary independence to a common institution. The Queen in Parliament of the newly-constituted United Kingdom of Great Britain now held the sovereign right to issue money and regulate the monetary system. By 1707 the accepted constitutional practice in England was that monetary powers lay with Parliament rather than in the Queen acting through the Privy Council. Parliament had the same constitutional and economic role as a central bank in a modern monetary union. The existence of shared central bank is nowadays regarded as the essential characteristic of a monetary union.⁹³

The main difference from a modern monetary union was that Article XVI did not define a common unit of account for the merged system. In a modern union, each constituent country uses the same legally-defined unit of account. Thus the euro unit was created to bring the euro-currency area into existence.⁹⁴ In 1707, however, there was no legal change to the Scottish system of monetary reckoning. The merk and the pound Scots lived on as accounting units, alongside the pound sterling.

⁹³ Mann (2012), paras 24.03-06. In the euro-area this is the European Central Bank, which has responsibility for conducting the monetary policy of the union: Treaty on the Functioning of the European Union (TFEU), Article 282(1).

⁹⁴ The existence of a common medium of exchange and unit of account distinguishes a full monetary union from a looser system where independent monetary systems coordinate their currencies by pegging them to a common standard: Mann (2012), paras 33.10-33.11; M Bordo and L Jonung, *Lessons for EMU from the History of Monetary Unions* (2000), 1-3.

Newspaper advertisements placed as late as 1740 show that the general public was familiar with reading prices in three units of account.⁹⁵ Private sellers still denominated land prices in merks or pounds Scots. In 1727 it seemed not to strike people as strange that one part of a sale price might be expressed in pounds Scots and the other in pounds sterling.⁹⁶ In the same year, an offer of employment for a school teacher quoted the main part of the teacher's salary in pounds Scots and a supplementary payment in sterling.⁹⁷ The only indication from these advertisements that the sterling had become the default unit of account is that when a price was quoted without adding "Scots" or "sterling", the parties seemed intend a sterling sum. The parties had to specify "pounds Scots" if they did not mean the price to be read in sterling units.

Accounting records were not kept in any uniform money of account. Government accounts in Scotland were recorded in pounds sterling after the union since they needed to be integrated into the larger fiscal structures centred on Westminster.⁹⁸ But many household accounts were still kept in pounds Scots. Evidence for this practice comes from some surviving internal accounts of estates forfeited after the 1715 Jacobite rebellion. The estates of James Stirling, Laird of Keir, were confiscated and sold. Receipts gathered in the estate accounts from about 1716 show the full diversity of accounting practice. Staff on the estate received their wages at rates agreed variously in merks, pounds Scots or pounds sterling. But all these sums were reduced to pounds Scots in the household accounts.⁹⁹ When the estate tenants reported their rents to the Crown surveyor, they spoke of amounts set in merks and pounds Scots.¹⁰⁰ When the estates came to be sold, the abstract of sale advertised their rental incomes in sums converted to sterling.¹⁰¹ Day-to-day usage or customary practice determined which system of reckoning the public found most convenient. People were familiar with the idea that the identical quantities of volume, weight or length could be expressed in different measurement systems. Systems of measurement varied between regions, and from one kind of

⁹⁵ Based on a search of surviving issues of the *Caledonian Mercury* (28 April to December 1720, January to February 1740) and the *Edinburgh Evening Courant* (January to December 1727; January to February 1740) held at the National Library of Scotland.

⁹⁶ Eg, (1727) *Edinburgh Evening Courant*, pp 1250 (annual rent denominated in pounds Scots but quarry income in pounds sterling), 1266 (sale of estate with two rented properties, one with a rent in pounds Scots and in kind, and the other in pounds sterling).

⁹⁷ (1727) *Edinburgh Evening Courant*, p 1226 (salary of 300 pounds Scots per annum with a bonus of 5 pounds sterling).

⁹⁸ NRS E201/1 /1 Receiver General's Accounts 20 July 1709-29 September 1710.

⁹⁹ NRS E637/6 "Various tradesmen's and employees' accounts presented to the Laird of Keir, circa 1716".

¹⁰⁰ NRS E637/1/10 "Depositions of the Tennants of the Estate of Keir taken by the Surveyor" (1716).

¹⁰¹ Eg, "Abstract and Articles of Sale" of the Estates of Stirling of Keir (1720); McDonald of Sleat (1722); MacKenzie of Applecross (1722) in NLS Ry.1.1.136.

commodity to another.¹⁰² The multiplicity of counting systems applied to coin was no different.

The Bank of Scotland was probably an outlier in keeping its accounts in sterling before the union.¹⁰³ Sterling accounting made a natural fit for its daily business activity. Much its business was in remitting money bills to and from London. Part of its subscription capital came from English investors who needed to be paid dividends. But in its external dealings the Bank was also sensitive to the units of reckoning that its customers were familiar with using. The earliest surviving Bank of Scotland note from 1716 is denominated in pounds Scots although the Bank would have accounted for it internally, like all its other entries, in sterling. The note has a face value of 12 / Scots corresponding to a clean sum of 1 / sterling. Sterling units seemed to shape the Bank's assessment of round-number sums. A surviving note issued in 1723 was also for 12 / Scots although by 1741 the Bank was issuing notes for 1 / sterling, which may reflect a general change in day-to-day practice.¹⁰⁴ The Bank's 1695 subscription capital was recorded in pounds Scots, consistently with the terms of its founding statute. More surprisingly, its additional capital subscriptions seventy or more years after the Union were still recorded in pounds Scots even when they were raised under the authority of United Kingdom statutes.¹⁰⁵ It was only in 1804 that its new capital subscriptions began to be recorded in pounds sterling. Even then, some of the subscription amounts were in odd sterling sums corresponding to clean sums in pounds Scots.

G. LESSONS AND CONCLUSIONS

Michael Bordo has observed that monetary unions tend to follow from political unions,¹⁰⁶ and the events of 1707 bear out his observation. The merger of the Scottish and English currencies was a result of the larger political union between them, which may explain why the Commissioners who negotiated the Treaty found the monetary union an uncontroversial part

¹⁰² For the diversity of measuring names and units in Scotland, see R E Zupko, "The Weights and Measures of Scotland before the Union" (1977) 56 *Scottish Historical Review* 119, and generally R D Connor and A D C Simpson, *Weights and Measures in Scotland: a European Perspective* (2004). Article XVII of the Treaty provided that Scotland should use the same weights and measures after the union as England. But the old Scots units remained in use well into the nineteenth century.

¹⁰³ See section B above. The Royal Bank of Scotland used sterling as its accounting unit from its foundation in 1727.

¹⁰⁴ See the notes reproduced in S G Checkland, *Scottish Banking: a History; 1695-1973* (1975), 32; and A Cameron, *Bank of Scotland, 1695-1995* (1995), 39, 44.

¹⁰⁵ BOS GB1830 BOS/3/1/1/1, recording subscriptions in 1695, 1774, 1784, 1792, 1794 and 1804.

¹⁰⁶ M Bordo and L Jonung, *Lessons for EMU from the History of Monetary Unions* (2000), 35-36.

of their larger project. A monetary union is more likely to be contentious when it is formed between countries that retain their general political sovereignty, as happened when the euro-area was formed. The motive for the 1707 union also differed from the reasons for formation of the euro-area. To be sure, the elimination of exchange differences between England and Scotland would have helped the free movement of capital and goods between the two countries. To this extent, Article XVI achieved the same ends as the treaty provisions removing customs barriers between England and Scotland and harmonising the taxation regime between them.¹⁰⁷ But the dearth of contemporary debate about the monetary union implies that it was a minor consideration in the minds of the Commissioners who negotiated the union. The official documentation persisted in calling the process, “a re-coinage”, a prosaic name for it if ever there was. It gave no hint of the larger constitutional shift at work.

Article XVI was as much concerned with re-basing the Scots and English currencies as it was with creating a monetary union. It reinstated the agreement of James VI/I’s mint officers in 1604 that the Scottish monetary system should be coordinated with the English system and its money of account pegged to the same intrinsic standard.¹⁰⁸ Article XVI corrected the divergence between the nominal and intrinsic standards that had emerged in the intervening century. The coinage in Scotland was restored to the full equivalence of 1604. The only difference was that the Scots and sterling units of account now related to coins that were completely identical in England and in Scotland.

We have seen how Article XVI did not define a new unit of account for the combined monetary system of the United Kingdom. It would be unnecessary to ask whether the Scots pound or the Scots merk was abolished in 1707. Abolition of the old Scots units of account was unnecessary to rebase the currency of the two countries in the same standard. It would also be anachronistic to ask whether the old Scots units of account were abolished by the union. The idea that a state should have a national unit of account, defined in terms of precious metal, developed afterwards in the nineteenth century. It only happened in the United Kingdom in 1816. The Coinage Act of that year defined the weight and fineness of the gold sovereign coin and gave it a clean money of account value of 1 *l*. “[T]he Gold Coin made according to the Indentures of the Mint should henceforth be the sole Standard Measure of Value”.¹⁰⁹ Only then was it possible to identify the pound as a unit of account with the pound as real money, where each derived its value by a legally-defined reciprocity with the other.

¹⁰⁷ Notably Articles VI, XIV, XVIII.

¹⁰⁸ See section C above.

¹⁰⁹ Coinage Act 1816, s 11 (UK).

The operation of Article XVI shows how legal conceptions of monetary union mean different things depending on the kinds of currency combined by the union. When two monetary systems were grounded in commodity metals – as Scotland and England were in 1707 – it was enough to combine them by fixing an irrevocable par of exchange between their monetary units and a quantity of metal. It was enough to have coins minted to the same standard circulating in each country. There was no need to define a new unit of account for the countries in the newly-formed union. That only became necessary when the two systems moved to using fiat money with no legal connection with any quantity of metal. This was the case with the legacy currencies in the euro-area. The unit of account in a fiat money system does not derive its value from a relationship with any other thing. The currency depends on a legal act of the state.¹¹⁰ So it is that when fiat money systems combine to form a monetary union – as the member countries of euro-area did in 1999 – the law must define new a unit of account for the combined system. The new unit becomes the name, and the whole substance, of the currency.

¹¹⁰ G Knapp, *The State Theory of Money*, trans H M Lucas and J Bonar (1924), 30-44.